

## **Amendments to the Claims**

### **Listing of Claims:**

Original Claims 1-14 (canceled).

Claim 15 (new). A method for determining a current position of a head of an occupant in a passenger compartment of a motor vehicle, the head moving toward an automatic dynamic disabling zone in front of an airbag module, which comprises the steps of:

providing an image acquisition unit having an ideal line of sight being substantially perpendicular to an ideal direction of movement of the occupant;

recording an image scenario in the passenger compartment of the motor vehicle containing the occupant at least cyclically with the image acquisition unit and image information relating to the occupant being detected;

determining both a position of a geometric center of the head and an apparent size of the head in the ideal direction of movement in a respective current scenario image;

defining current lines of sight of the image acquisition unit as a vector, from a defined position of the image acquisition unit to a respective current position of the geometric center of the head;

calculating respective current angles values between the ideal line of sight and the current lines of sight of the image acquisition unit;

storing the respective current angles values and the apparent size of the head in a storage unit; and

using the apparent size of the head stored in the storage unit at which an

absolute sum of a difference between the respective current angle values and  $0^\circ$  was minimal to be an actual size of the head.

Claim 16 (new). The method according to claim 15, which further comprises using a 3D camera as the image acquisition unit, the 3D camera operating according to a method selected from the group consisting of a stereoscopic method, a pencil of light method, and a time of flight method.

Claim 17 (new). The method according to claim 15, which further comprises basing the defined position of the image acquisition unit on a center of a lens aperture of the image acquisition unit.

Claim 18 (new). The method according to claim 17, which further comprises using a stereo camera as the image acquisition unit and basing the defined position on a center of a left lens aperture of the stereo camera.

Claim 19 (new). The method according to claim 15, which further comprises recording continuously, via the image acquisition unit, images of a relevant scenario, at least 25 images per second.

Claim 20 (new). The method according to claim 15, which further comprises dimensioning a size of the storage unit such that at least all measured values of a slow head movement from a first head position to a second head position can be stored.

Claim 21 (new). The method according to claim 15, which further comprises using a ring buffer store as the storage unit, the ring buffer store being first filled and from then on an oldest value is always replaced by a current value.

Claim 22 (new). The method according to claim 15, which further comprises filtering recordings of a head movement by filters and/or movement models.

Claim 23 (new). The method according to claim 15, which further comprises combining different views of the occupant for forming a 3D overall view of the occupant.

Claim 24 (new). The method according to claim 23, which further comprises:

simulating a front of the occupant for the 3D overall view; and

calculating a distance between the automatic dynamic disabling zone or the airbag module and the front of the occupant.

Claim 25 (new). The method according to claim 15, which further comprises recording continuously, via the image acquisition unit, images of a relevant scenario, at least 30 images per second.

Claim 26 (new). The method according to claim 15, which further comprises recording continuously, via the image acquisition unit, images of a relevant scenario, at least 35 images per second.

Claim 27 (new). The method according to claim 24, which further comprises simulating a facial profile of the occupant.

Claim 28 (new). A method for determining a current position of a body part of an occupant in a passenger compartment of a motor vehicle, the body part moving toward an automatic dynamic disabling zone in front of an airbag module, which comprises the steps of:

providing an image acquisition unit having an ideal line of sight being substantially perpendicular to an ideal direction of movement of the occupant;

recording an image scenario in the passenger compartment of the motor vehicle containing the occupant at least cyclically with the image acquisition unit and

image information relating to the occupant being detected;

determining both a position of a geometric center of the body part and an apparent size of the body part in the ideal direction of movement in a respective current scenario image;

defining current lines of sight of the image acquisition unit as a vector, from a defined position of the image acquisition unit to a respective current position of the geometric center of the body part;

calculating respective current angles values between the ideal line of sight and the current lines of sight of the image acquisition unit;

storing the respective current angles values and the apparent size of the body part in a storage unit;

using the apparent size of the body part stored in the storage unit at which an absolute sum of a difference between the respective current angle values and  $0^\circ$  was minimal to be an actual size of the body part.

Claim 29 (new). The method according to claim 28, which further comprises determining a size of a torso as the body part.

Claim 30 (new). A method for determining a current position of a head of an occupant in a passenger compartment of a motor vehicle, the head moving toward an automatic dynamic disabling zone in front of an airbag module, which comprises the steps of:

providing an image acquisition unit having an ideal line of sight being substantially perpendicular to an ideal direction of movement of the occupant;

recording an image scenario in the passenger compartment of the motor vehicle

containing the occupant at least cyclically with the image acquisition unit and image information relating to the occupant being detected;

determining both a position of a geometric center of the head and an apparent size of the head in a ideal direction of movement in a respective current scenario image;

defining current lines of sight of the image acquisition unit as a vector, from a defined position of the image acquisition unit to a respective current position of the geometric center of the head;

calculating respective current angles between the ideal direction of movement of the head and the current lines of sight of the image acquisition unit;

storing the respective current values for angles and the apparent size of the head in a storage unit; and

using the apparent size of the head stored in the storage unit at which an absolute sum of a difference between the respective current angle values and  $90^\circ$  was minimal to be an actual size of the head.

Claim 31 (new). The method according to claim 30, which further comprises using a 3D camera as the image acquisition unit, the 3D camera operating according to a method selected from the group consisting of a stereoscopic method, a pencil of light method, and a time of flight method.

Claim 32 (new). The method according to claim 30, which further comprises basing the defined position of the image acquisition unit on a center of a lens aperture of the image acquisition unit.

Claim 33 (new). The method according to claim 32, which further comprises using a stereo camera as the image acquisition unit and basing the defined

position on a center of a left lens aperture of the stereo camera.

Claim 34 (new). The method according to claim 30, which further comprises recording continuously, via the image acquisition unit, images of a relevant scenario, at least 25 images per second.

Claim 35 (new). The method according to claim 30, which further comprises dimensioning a size of the storage unit such that at least all measured values of a slow head movement from a first head position to a second head position can be stored.

Claim 36 (new). The method according to claim 30, which further comprises using a ring buffer store as the storage unit, the ring buffer store being first filled and from then on an oldest value is always replaced by a current value.

Claim 37 (new). The method according to claim 30, which further comprises filtering recordings of a head movement by filters and/or movement models.

Claim 38 (new). The method according to claim 30, which further comprises combining different views of the occupant for forming a 3D overall view of the occupant.

Claim 39 (new). The method according to claim 38, which further comprises:

simulating a front of the occupant for the 3D overall view; and

calculating a distance between the automatic dynamic disabling zone or the airbag module and the front of the occupant.

Claim 40 (new). The method according to claim 30, which further comprises recording continuously, via the image acquisition unit, images of a relevant scenario, at least 30 images per second.

Claim 41 (new). The method according to claim 30, which further comprises recording continuously, via the image acquisition unit, images of a relevant scenario, at least 35 images per second.

Claim 42 (new). The method according to claim 39, which further comprises simulating a facial profile of the occupant.

Claim 43 (new). A method for determining a current position of a head of an occupant in a passenger compartment of a motor vehicle, the head moving toward an automatic dynamic disabling zone in front of an airbag module, which comprises the steps of:

providing an image acquisition unit having an ideal line of sight being substantially perpendicular to an ideal direction of movement of the occupant;

recording an image scenario in the passenger compartment of the motor vehicle containing the occupant at least cyclically with the image acquisition unit and image information relating to the occupant being detected;

determining both a position of a geometric center of the head and an apparent size of the head in a ideal direction of movement in a respective current scenario image;

defining current lines of sight of the image acquisition unit as a vector, from a defined position of the image acquisition unit to a respective current position of the geometric center of the head;

calculating respective current angles between current actual movement vectors of the head and the current lines of sight of the image acquisition unit;

storing the respective current values for angles and the apparent size of the head

in a storage unit; and

using the apparent size of the head stored in the storage unit at which an absolute sum of a difference between the respective current angle values and  $90^\circ$  was minimal to be an actual size of the head.

Claim 44 (new). The method according to claim 43, which further comprises:

storing a respective last value for the position of the geometric center of the head;  
and

calculating a respective current movement vector from the stored last and current 3-dimensional positions of the head.

Claim 45 (new). A device for determining a current position of a head of an occupant in a passenger compartment of a motor vehicle, the head moving toward an automatic dynamic disabling zone in front of an airbag module, the device comprising:

an image acquisition unit having an ideal line of sight being substantially perpendicular to an ideal direction of movement of the occupant, said image acquisition unit programmed to:

record an image scenario in the passenger compartment of the motor vehicle containing the occupant at least cyclically with the image acquisition unit and image information relating to the occupant being detected;

determine both a position of a geometric center of the head and an apparent size of the head in the ideal direction of movement in a respective current scenario image;

define current lines of sight of the image acquisition unit as a vector, from a defined position of the image acquisition unit to a respective current position of the geometric center of the head;

calculate respective current angles values between the ideal line of sight and the current lines of sight of the image acquisition unit;

store the respective current angles values and the apparent size of the head in a storage unit; and

use the apparent size of the head stored in the storage unit at which an absolute sum of a difference between the respective current angle values and  $0^\circ$  was minimal to be an actual size of the head.

Claim 46 (new). A device for determining a current position of a head of an occupant in a passenger compartment of a motor vehicle, the head moving toward an automatic dynamic disabling zone in front of an airbag module, the device comprising:

an image acquisition unit having an ideal line of sight being substantially perpendicular to an ideal direction of movement of the occupant, said image acquisition unit programmed to:

record an image scenario in the passenger compartment of the motor vehicle containing the occupant at least cyclically with the image acquisition unit and image information relating to the occupant being detected;

determine both a position of a geometric center of the head and an apparent size of the head in a ideal direction of movement in a respective current scenario image;

define current lines of sight of the image acquisition unit as a vector, from a defined position of the image acquisition unit to a respective current position of the geometric center of the head;

calculate respective current angles between the ideal direction of movement of the head and the current lines of sight of the image acquisition unit;

store the respective current values for angles and the apparent size of the head in a storage unit; and

use the apparent size of the head stored in the storage unit at which an absolute sum of a difference between the respective current angle values and  $90^\circ$  was minimal to be an actual size of the head.